

What is claimed is:

1. An image forming apparatus comprising:

an LED print head comprising an LED array composed of a plurality of LED elements whose lighting is controlled according to image data and a driving circuit for driving the plurality of LED elements; and

an LED array controller for controlling driving of the LED print head,

wherein the image forming apparatus further comprises:

a selective-information data feeder for storing information data corresponding to different sets of selective information inherent to the image forming apparatus and for feeding out information data corresponding to a selected item of the selective information, and

wherein the LED array controller comprises:

a characteristic data memory for storing a plurality of sets of characteristic data each relating to one of the plurality of LED elements; and

a driving current correction data calculator for reading out the characteristic data from the characteristic data memory while receiving the information data from the selective-information data feeder in order to calculate, based on the characteristic data and the information data, driving current correction data for each of the plurality of LED elements.

2. An image forming apparatus comprising:

an LED print head comprising an LED array composed of a plurality of LED elements whose lighting is controlled according to image data and a driving circuit for driving the plurality of LED elements; and

an LED array controller for controlling driving of the LED print head,

wherein the image forming apparatus further comprises:

a selective-information data feeder for storing information data corresponding to different sets of selective information inherent to the image forming apparatus and for feeding out information data corresponding to a selected item of the selective information, and

wherein the LED array controller comprises:

a characteristic data memory for storing a plurality of sets of characteristic data each relating to one of the plurality of LED elements;

a driving current correction data calculator for reading out the characteristic data from the characteristic data memory while receiving the information data from the selective-information data feeder in order to calculate, based on the characteristic data and the information data, driving current correction data for each of the plurality of LED elements; and

a driving current correction data memory for reading out the driving current correction data from the driving current correction data calculator and for storing the driving current correction data thus read out.

3. An image forming apparatus as claimed in claim 1,

wherein the different sets of selective information correspond to a plurality of screens with different characteristics.

4. An image forming apparatus as claimed in claim 1,

wherein the different sets of selective information correspond to a plurality of toner colors.

5. An image forming apparatus comprising:

an LED print head comprising an LED array composed of a plurality of LED elements whose lighting is controlled according to image data and a driving circuit for driving the plurality of LED elements; and

an LED array controller for controlling driving of the LED print head,

wherein the image forming apparatus further comprises:

a detected data feeder for detecting time-related variation in the image forming apparatus in order to feed out detected data, and

wherein the LED array controller comprises:

a characteristic data memory for storing a plurality of sets of characteristic data each relating to one of the plurality of LED elements; and

a driving current correction data calculator for reading out the characteristic data from the characteristic data memory while receiving the detected data from the detected data feeder in order to calculate, based on the characteristic data, driving current correction data for each of the plurality of LED elements and increase or decrease the driving current correction data according to the detected data.

6. An image forming apparatus comprising:

an LED print head comprising an LED array composed of a plurality of LED elements whose lighting is controlled according to image data and a driving circuit for driving the plurality of LED elements; and

an LED array controller for controlling driving of the LED print head,

wherein the image forming apparatus further comprises:

a detected data feeder for detecting time-related variation in the image forming apparatus in order to feed out detected data, and

wherein the LED array controller comprises:

a characteristic data memory for storing a plurality of sets of characteristic data each relating to one of the plurality of LED elements;

a driving current correction data calculator for reading out the characteristic data from the characteristic data memory while receiving the detected data from the detected data feeder in order to calculate, based on the characteristic data, driving current correction data for each of the plurality of LED elements and increase or decrease the driving current correction data according to the detected data; and

a driving current correction data memory for reading out the driving current correction data calculated and increased or decreased by the driving current correction data calculator and for storing the driving current correction data thus read out.

7. An image forming apparatus as claimed in claim 5,

wherein the detected data feeder detects atmospheric temperature inside the image forming apparatus and feeds out the temperature as the detected data.

8. An image forming apparatus as claimed in claim 5,

wherein the detected data feeder detects humidity inside the image forming apparatus and feeds out the humidity as the detected data.

9. An image forming apparatus as claimed in claim 5,
wherein the detected data feeder detects number of sheets of paper on which the image forming apparatus has formed an image and feeds out the number as the detected data.
10. An image forming apparatus as claimed in claim 5,
wherein the detected data feeder detects a developing bias potential in the image forming apparatus and feeds out the voltage as the detected data.
11. An image forming apparatus as claimed in claim 5,
wherein the detected data feeder detects a dark potential and a light potential in the image forming apparatus and feeds out the dark potential and the light potential as the detected data.
12. An image forming apparatus comprising:
an LED print head comprising an LED array composed of a plurality of LED elements whose lighting is controlled according to image data and a driving circuit for driving the plurality of LED elements; and
an LED array controller for controlling driving of the LED print head,
wherein the image forming apparatus further comprises:
a paper image data feeder for reading an image formed by the image forming apparatus on a sheet of paper output therefrom in order to feed out paper image data, and
wherein the LED array controller comprises:
a characteristic data memory for storing a plurality of sets of characteristic data each

relating to one of the plurality of LED elements;

a driving current correction data calculator for reading out the characteristic data from the characteristic data memory while receiving the paper image data from the paper image data feeder in order to calculate, based on the characteristic data, driving current correction data for each of the plurality of LED elements and increase or decrease the driving current correction data according to the paper image data.

13. An image forming apparatus as claimed in claim 12,

wherein the paper image data feeder includes an image sensor for reading the image formed on the sheet of paper output from the image forming apparatus.

14. An image forming apparatus comprising:

an LED print head comprising an LED array composed of a plurality of LED elements whose lighting is controlled according to image data and a driving circuit for driving the plurality of LED elements; and

an LED array controller for controlling driving of the LED print head,

wherein the image forming apparatus further comprises:

a toner image data feeder for reading a toner image formed on an image-carrying member by the image forming apparatus in order to feed out toner image data, and

wherein the LED array controller comprises:

a characteristic data memory for storing a plurality of sets of characteristic data each relating to one of the plurality of LED elements;

a driving current correction data calculator for reading out the characteristic data from

the characteristic data memory while receiving the toner image data from the toner image data feeder in order to calculate, based on the characteristic data, driving current correction data for each of the plurality of LED elements and increase or decrease the driving current correction data according to the toner image data.

15. An image forming apparatus as claimed in claim 14,
wherein the image-carrying member is a photoconductor or a transport belt.
16. An image forming apparatus as claimed in claim 14,
wherein the toner data feeder includes an image sensor for reading the toner image formed on the image-carrying member.
17. An image forming apparatus as claimed in claim 12,
wherein the LED array controller further comprises a driving current correction data memory for reading out the driving current correction data calculated and increased or decreased by the driving current correction data calculator and for storing the driving current correction data thus read out.